The Challenge
Enterprises everywhere are challenged to increase competitiveness by bringing new applications to market in less time. Traditional approaches to deploying SAP environments hinder this process. Researching and specifying best-of-breed products that will work well together takes time. Integrating them is slow and depends on successfully navigating a long list of time-consuming, error-prone manual processes. Performance is unpredictable without pretesting and prevalidating the end-to-end solution. Once deployed, management can be difficult because tools are not necessarily designed to work together. All of these factors can slow implementation of new applications and lengthen time to market.

The Solution
FlexPod is a converged infrastructure (CI) platform that helps automate your SAP environment and bring new applications to market quickly. This preintegrated and prevalidated solution unites the best technologies from Cisco and NetApp so you can power your SAP applications with the latest technological innovations. Deployment is fast, scaling is easy, and performance meets SAP's stringent requirements.

FlexPod solutions for SAP are tested and documented through joint engineering efforts between Cisco and NetApp. The resulting Cisco® Validated Designs help reduce risk and guesswork, and certification for SAP HANA Tailored Datacenter Integration (TDI) simplifies the selection of best-of-breed products. The outcome is fast application deployment and shorter time to market.

IDC calls FlexPod “a mature, feature-rich infrastructure that is ideal for enterprises that want to modernize their datacenters.” Its study of FlexPod customers highlights real-world customer benefits that are summarized on page 2.
Solution Components
FlexPod solutions for SAP integrate Cisco UCS® servers, NetApp® All-Flash FAS (AFF) storage systems, and Cisco Nexus® switches.

Cisco UCS servers
Equipped with the latest 2nd Gen Intel® Xeon® processors for industry-leading performance, Cisco UCS servers can be configured with Intel Optane™ DC persistent memory. In SAP HANA environments, this lowers overall server and memory costs. Persistent memory maintains SAP HANA databases in the server, improving recovery from errors by as much as a factor of 12. Cisco UCS is a self-aware, self-integrating system whose deployment is automated through Cisco UCS Manager or by Cisco Intersight™ software as a service. Cisco UCS automation helps contribute to the benefits summarized at left including 32% faster software installation and management and 43% fewer staff needed to manage the solution.

NetApp AFF storage systems
Named a leader for its AFF A-Series in the 2019 Gartner Magic Quadrant for Primary Storage, NetApp has a 20-year history of innovative technology collaboration with SAP and SAP customers. NetApp solutions for SAP help to accelerate projects, simplify operations, and future-proof IT investments. Based around NetApp ONTAP™ data management software, these systems enable end-to-end solutions to integrate tightly with standard SAP applications for seamless operations. NetApp SnapCenter provides centralized control and oversight, allowing you to use a single tool to backup, restore, and clone databases such as SAP HANA. For automated provisioning of SAP development and test environments, NetApp ONTAP™ data management software tightly integrates into the SAP Landscape Management (SAP LaMa) tool. New applications come up quickly with space-efficient copies of storage volumes enabled by NetApp’s ONTAP FlexClone technology.

Cisco Nexus networking
High-performance, low-latency Cisco Nexus switches offer exceptional efficiency at cloud scale. You can gain real-time, pervasive visibility and high-performance connectivity with built-in Cisco Tetration Analytics™. It uses behavior-based application insight and machine learning to build dynamic policy models and automate security enforcement. Cisco ACI Anywhere links your data center networks to where your data resides—locally, at remote data centers, or in the cloud—with policy-based security and automation.

Why FlexPod Solutions for SAP?
FlexPod solutions deliver on the key performance indicators for SAP environments, and are certified for SAP HANA TDI deployment. Our solutions deliver:

- Foundational technology for your entire SAP landscape with best-in-class performance
- Faster deployment and reduced risk with prevalidated designs
- Automation that helps you speed new applications to market
- Innovative technology including persistent memory, all-Flash storage, and a high-speed unified network fabric.
- Proven value, that is validated by IDC, including higher return on investment (ROI), and lower total cost of ownership